THE CLAIMS DEFINING THIS INVENTION ARE AS FOLLOWS:

1. A filler for use in composite materials wherein said filler comprises carbonized vegetative-based material wherein said carbonized vegetative-based material is the product of burning fresh vegetative-based material at 803° to 804°C for 3 to 4 seconds.

2. A filler according to claim 1 wherein the carbonized vegetative-based material is carbonized rice husk.

3. A process for the production of a carbonised vegetative-based filler wherein said process comprises burning a fresh vegetative-based material at about 803° to 804°C for 3 to 4 seconds.

4. A process according to claim 3 wherein the fresh vegetative material is ground to a particle size of from 100 mesh to 400 mesh.

5. A process according to claim 3 or claim 4 wherein said process utilises fresh rice husk as the vegetative material.

6. A filler according to any one of claims 1 or 2 when produced by a process according to claim 4.

7. A method for improving the anti-static, flame retardant, accelerator, plasticiser and/or blowing characteristics of a composite material wherein said method comprises blending into the composite material with a carbonised vegetative-based filler according to claim 1 or claim 2 and wherein said blending is substantially completed prior to incorporation of any additives, if any.

8. A method according to claim 7 wherein the carbonised vegetative filler has a particle size of from 100 mesh to 400 mesh.

9. A method according to claim 7 or claim 8 wherein the composite material is latex (NR/SR) the dosage of the carbonised vegetative filler is from 1.5 to 2.5 phr (parts per hundred).

10. A method according to any one of claims 7 to 9 wherein said composite material is selected from the group comprising:

i) thermoplastic resins;
ii) thermoset plastics;
iii) rubbers and elastomeric materials;
iv) conductive coatings;
v) printing inks;
vi) bitumen; and
vii) concrete.

11. A composite material having improved anti-static, flame retardant, accelerator, plasticiser and/or blowing characteristics wherein said composite material is produced by the method of any one of claims 7 to 10

12. A method for improving the mechanical properties of bitumen, said method comprising blending fresh and/or carbonised rice husk together with tyre crumb into said bitumen.

13. A method according to claim 12 wherein the rice husk has a particle size of from 100 to 200 mesh and the dosage of rice husk is between 40 to 60 phr.

14. A method according to claim 12 or claim 13 wherein the rice husk and tyre crumb is mixed in composition with a palm oil effluent prior to it being added to the bitumen.

15. A method according to claim 14 wherein the composition comprises about 50% tyre crumb, about 45% rice husk and about 5% palm oil effluent.

16. A method according to claim 14 or claim 15 wherein the composition is added in a dosage amount of about 20% by weight of the said bitumen.

17. A method for improving the blowing character of a thermoplastic resin this method comprising blending fresh and/or carbonised rice husk into said thermoplastic resin. wherein the rice husk has a particle size of between 325 to 400 mesh and the dosage of the rice husk is between 1.5 to 2.5 phr.

18. A method for improving the mechanical properties of thermoplastic resin including compression strength, said method comprising blending rice husk into said thermoplastic resin wherein said rice husk has a particle size of between 325 to 400 mesh and the dosage of the rice husk is between 1.5 and 2.5 phr.

19. A method for improving the blowing character of rubber said method comprising blending fresh and/or carbonised rice husk into said rubber.

20. A method according to claim 19 wherein the rice husk has a particle size of between 325 to 400 mesh and the dosage of the rice husk is between 1.5 and 27 phr.

21. A method for reducing the cure time of ebonite NR wherein said method comprises blending fresh rice husk into said ebonite NR.wherein the rice husk has a particle size of between 100 to 200 mesh and the dosage of the rice husk is between 16 to 30 phr.

22. A method for improving the scotch time of rubber said method comprising blending fresh and/or carbonised rice husk into said rubber.

23. A method according to claim 22 wherein the rice husk has a particle size of between 100 to 200 mesh and the dosage of rice husk is between 5 to 10 phr.

24. A method for improving the flame retardant ability of a thermoset resin said method comprising blending carbonised rice husk according to claim 2 into said thermoset resin.

25. A method according to claim 24 wherein the carbonised rice husk has a particle size of 325 to 400 mesh and the dosage of carbonised rice husk is between 10 to 15 phr.

26. A method for improving the mechanical properties of thermoset resins including tensile and torque strength, said method comprising blending carbonised rice husk according to claim 2 into said thermoset resin.

27. A method according to claim 26 wherein the rice husk has a particle size of between 100 to 200 mesh and the dosage of rice husk is between 10 to 15 phr.

28. A method for improving the anti-static properties of a thermoset resin said method comprising blending carbonised rice husk according to claim 2 into said thermoset resin.

29. A method according to claim 27 wherein the carbonised rice husk has a particle size of between 325 to 400 mesh and the dosage of carbonised rice husk is between 10 to 15 phr.

30. A method for improving the anti-static properties of rubber and/or rubber latex said method comprising blending carbonised rice husk according to claim 2 into said rubber and/or rubber-latex.

31. A method according to claim 30 wherein the carbonised rice husk has a particle size of between 325 to 400 mesh and the dosage of carbonised rice husk is between 5 to 15 phr.

32. A method for improving the mechanical properties of concrete said method comprising blending carbonised rice husk according to claim 2 into said concrete.

33. A method according to claim 32 wherein the rice husk has a particle size of between 100 to 200 mesh and the dosage of the rice husk is between 10 to 15 phr.

34. A filler according to claim 1 substantially as hereinbefore described with reference to any of the examples.

35. A process according to claim 3 substantially as hereinbefore described with reference to any of the examples.

36. A method according to claim 7 substantially as hereinbefore described with reference to any of the examples.

37. A composite material according to claim 11 substantially as hereinbefore described with reference to any of the examples.

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PHILLIPS ORMONDE & FITZPATRICK
Attorneys for:

Contract Research & Development (M) Sdn. Bhd.
And Mr. D J. Tadgell